

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method for approving a security change for a file security system that secures electronic files, comprising:

receiving a request for the security change from a requestor, the security change being used for determining access rights comprising permission to retrieve and to receive an electronic file from within a secure file store;

identifying a plurality of approvers to approve or disapprove of the requested security change by accessing an approver set in an approval manager module;

notifying the approvers of an approval request for the requested security to change;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change; and

determining whether the requested security change is approved based on responses from the approvers to the approval request.

2. (Previously Presented) The method as recited in claim 1, wherein said notifying of the approvers is achieved by electronic mail.

3. (Previously Presented) The method as recited in claim 2, further comprising:

receiving the responses from the approval group as electronic mail.

Reply to Office Action of January 18, 2011

4. (Previously Presented) The method as recited in claim 1, wherein determining whether the requested security change is approved includes determining that no one of the plurality of approvers is authorized to individually approve the requested security change.

5. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying a plurality of approvers that are arranged as a set or group.

6. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying a plurality of approvers that are arranged in a plurality of sets or groups, wherein said determining whether the requested security change is approved comprises evaluating whether more than one of the plurality of sets or groups have approved the requested security change.

7. (Previously Presented) The method as recited in claim 6, wherein identifying the plurality of approvers comprises:

identifying a plurality of sets or groups that are arranged in a hierarchy, and wherein progression to a next level in the hierarchy comprises obtaining approval from the set or group associated with a current level.

Reply to Office Action of January 18, 2011

8. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying a plurality of users of the file security system.

9. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying a plurality of approvers that form a set of approvers, wherein said determining whether the requested security change is approved comprises evaluating whether a subset of the set of approvers approve the requested security change.

10. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying the approvers based on the requested security change.

11. (Previously Presented) The method as recited in claim 1, wherein identifying the plurality of approvers comprises:

identifying the approvers based on the requestor.

12. (Previously Presented) The method as recited in claim 1, wherein said notifying operates to substantially simultaneously notify all of the approvers of the approval request for the requested security change.

Reply to Office Action of January 18, 2011

13. (Previously Presented) The method as recited in claim 1, wherein said notifying operates to substantially concurrently notify all of the approvers of the approval request for the requested security change.

14. (Previously Presented) The method as recited in claim 1, wherein receiving the request for the security change comprises:

receiving a request for a security change that applies to electronic documents.

15. (Previously Presented) A file security system configured to restrict access to secured electronic documents, comprising:

an access server device configured to restrict access to the secured electronic documents; and

an approval manager operatively connected to said access server and configured to operate a security change approval process to determine whether a requested security change is approved, the security change being used for determining access rights comprising permission to retrieve and to receive the secured electronic documents from within a secure file store,

wherein, in operating the security change approval process, the approval manager is configured to notify a plurality of approvers of the requested security change, to ask the approvers to approve or disapprove the requested security change, and to access an approver set to identify the plurality of approvers, and

wherein the approval manager is further configured to determine, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change.

Reply to Office Action of January 18, 2011

16. (Previously Presented) The file security system as recited in claim 15, wherein said approval manager is configured to operate the security change approval process without any interaction from a system administrator.

17. (Cancelled)

18. (Previously Presented) The file security system as recited in claim 15, wherein the approval manager is configured to notify the approvers of the requested security change by electronic mail messages.

19. (Previously Presented) The file security system as recited in claim 18, wherein the approval manager is configured to enable the approvers to approve or disapprove the requested security change using reply electronic mail messages.

20. (Previously Presented) The file security system as recited in claim 19, wherein the approval manager is configured to enable the approvers to reply to the requested security change by electronic mail messages that include a digital signature of the associated approver to verify authenticity.

21. (Previously Presented) The file security system as recited in claim 15, wherein the approval manager is configured to specify that no one of the approvers is permitted to individually approve the requested security change.

22. (Previously Presented) The file security system as recited in claim 15, wherein the approval manager is configured to arrange the approvers as a set or group.

23. (Previously Presented) The file security system as recited in claim 15, wherein the approval manager is configured to arrange the approvers into a plurality of sets or groups, and

wherein said approval manager is configured to obtain approval from more than one of the plurality of sets or groups in order to determine that the requested security change is approved.

24. (Previously Presented) The file security system as recited in claim 23, wherein the approval manager is configured to arrange the plurality of sets or groups of approvers in a hierarchy, and wherein the approval manager is configured to allow progression of at least one of the approvers to a next level in the hierarchy in response to approval of the at least one approver from the set or group of approvers associated with a current level.

25. (Previously Presented) The file security system as recited in claim 15, wherein the approvers are users of the file security system.

26. (Previously Presented) The file security system as recited in claim 15, wherein the plurality of approvers form a set of approvers, and

Reply to Office Action of January 18, 2011

wherein said approval manager is configured to determine that the requested security change is approved in response to a subset of the set of approvers approving the requested security change.

27. (Previously Presented) The file security system as recited in claim 15, wherein said approval manager is configured to identify the plurality of approvers dependent on the requested security change.

28. (Previously Presented) The file security system as recited in claim 15, wherein said approval manager is configured to identify the plurality of approvers dependent on the requestor.

29. (Previously Presented) The file security system as recited in claim 15, further comprising:

a key store operatively connected to said access server and configured to store cryptographic keys used to gain access to the secured electronic documents.

30. (Previously Presented) An article of manufacture including a computer-readable storage medium having stored thereon computer-executable instructions, execution of which, by a computing device, causes the computing device to perform operations for approving a security change for a file security system that secures electronic files, the operations comprising:

Reply to Office Action of January 18, 2011

notifying a plurality of approvers of an approval request for the requested security change, the plurality of approvers identified by accessing an approver set in an approval manager module;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change; and

determining whether the requested security change is approved based on responses from the approvers to the approval request,

the security change being used for determining access rights comprising permission to retrieve and to receive an electronic file from within a secure file store.

31. (Previously Presented) The article of manufacture as recited in claim 30, wherein said notifying of the approvers is achieved by electronic mail.

32. (Previously Presented) The article of manufacture as recited in claim 31, wherein the responses from the approval group are electronic mail.

33. (Previously Presented) The article of manufacture as recited in claim 30, wherein no one of the plurality of approvers can individually approve the requested security change.

34. (Previously Presented) A method for approving a security change for a file security system that secures an electronic file, comprising:

receiving, in a computing device, a security change request from a requestor, the security change being used for determining access rights comprising permission to retrieve and to receive the electronic file from within a secure file store;

determining whether the requestor is authorized to perform the requested security change;

receiving an approval request from the requestor;

based on the receipt of the approval request, performing at least the following:

identifying one or more approvers to approve or disapprove of the requested security change;

notifying the one or more approvers of an approval request for the requested security change;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the one or more approvers to approve the requested security change; and

determining whether the requested security change is approved based on responses from the one or more approvers to the approval request.

35. (Previously Presented) A file security system configured to restrict access to a secured electronic document, comprising:

an access server device configured to restrict access to the secured electronic document; and

an approval manager module operatively connected to said access server, wherein said approval manager module is configured to determine whether a security change is authorized, the security change being used for determining permission to retrieve and to

Reply to Office Action of January 18, 2011

receive the secured electronic document from within a secure file store, and wherein the approval manager module is configured to operate, in response to a determination that the security change is not authorized, a security change approval process upon receipt of an approval request to determine whether the security change is approved,

wherein the approval manager is further configured to determine, for at least one response received from the approvers, whether it remains possible for a quorum of approvers identified by the security change approval process to approve the requested security change.

36. (Previously Presented) An article of manufacture including a computer-readable storage medium having stored thereon computer-executable instructions, execution of which, by a computing device, causes the computing device to perform operations for approving a security change for a file security system that secures an electronic file, the operations comprising:

determining whether the requested security change is authorized, the security change being used for determining access rights comprising permission to retrieve and to receive the electronic file from within a secure file store;

notifying one or more approvers of an approval request for the requested security change in response to determining that the requested security change is not authorized, and in response to receiving the approval request;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change; and

Reply to Office Action of January 18, 2011

determining whether the requested security change is approved based on responses from the one or more approvers to the approval.

37. (Previously Presented) The method of claim 1, wherein receiving the request for the security change comprises:

receiving a request that relates to a secure file store that is located at the file security system.

38. (Previously Presented) The method of claim 1, wherein receiving the request for the security change comprises:

receiving a request that relates to a secure file store that is located at the requestor.

39-44. (Cancelled)

45. (Previously Presented) The method of claim 1, further comprising:
performing the requested security change in response to determining that the requested security change has been approved.

46. (Previously Presented) The article of manufacture as recited in claim 30, the operations further comprising:

performing the requested security change when said determining determines that the requested security change has been approved.

Reply to Office Action of January 18, 2011

47. (Previously Presented) The method of claim 34, further comprising:

performing the requested security change in response to determining that the requestor is authorized to perform the requested security change, or in response to determining that the requested security change has been approved.

48. (Previously Presented) The article of manufacture of claim 36, the operations further comprising:

performing the requested security change in response to determining that the requested security change is authorized, or in response to determining that the requested security change has been approved.

49. (Currently Amended) A method comprising:

requesting a response from a plurality of approvers regarding a requested change of access rights to an electronic file;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change; and

modifying, by a computing device, the access rights to the electronic file subject to approval of the requested security change based on responses from the plurality of approvers.

50. (Previously Presented) An article of manufacture including a computer-readable storage medium having stored thereon computer-executable instructions,

Reply to Office Action of January 18, 2011

execution of which, by a computing device, causes the computing device to perform operations comprising:

requesting a response from a plurality of approvers regarding a requested change of access rights to an electronic file;

determining, for at least one response received from the approvers, whether it remains possible for a quorum of the approvers to approve the requested security change; and

modifying the access rights to the electronic file subject to approval of the requested security change based on responses from the plurality of approvers.

51. (Previously Presented) A file security system comprising:

an access server device configured to restrict access to an electronic file; and

an approval manager module operatively connected to the access server device and configured to request a response from a plurality of approvers regarding a requested change of access rights to an electronic file, determine for at least one response received from the approvers whether it remains possible for a quorum of the approvers to approve the requested security change, and modify the access rights to the electronic file subject to approval of the requested security change based on responses from the plurality of approvers.